

# Anchorage Amateur Radio Club

## Newsletter



**Next General Meeting**  
**January 5, 2018**  
**Carr Gottstein Building - 7:00pm**  
**4225 University Drive**  
**Anchorage, AK**



**Happy Holidays December, 2017**



**Happy Holidays! Help Santa out of your array if he gets caught.**

**December 1, 2017 General Meeting: 4225 University Drive Anchorage, AK**

Author: [Allen, KB1QCE](#)

Be sure you're ready for the AARC December meeting/Annual Christmas Party. The location is at the usual APU location. We will have an "ugly" or cute Christmas shirt/sweater/hoody contest. There will be special points given for "electronics" used.

Also at the December meeting will be a gift swap. To participate, you must bring a wrapped gift, suggested value between \$15-25. Please no white elephant or get rid of your unwanted junk gifts.

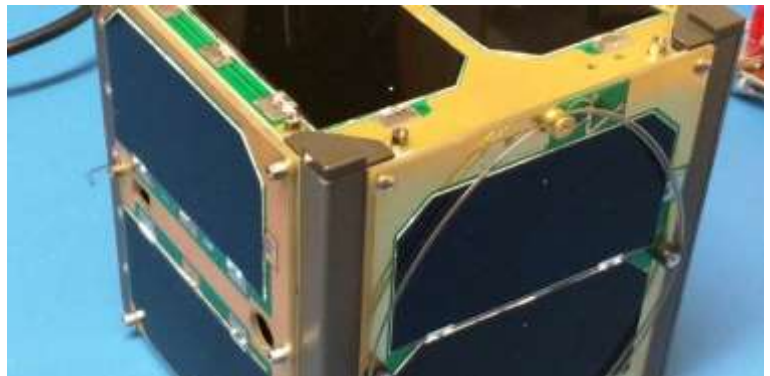
Due to budgetary constraints, the food this year will be a pot luck of "finger foods". Based on your last name, please bring either "savory" or "sweet" finger foods. Please Do Not bring anything that requires a spoon or fork (there will only be plates, no spoons or forks). A-L please bring "savory" items. M-Z please bring "sweet" items. The club will supply plates, napkins, water and an assortment of so-

das.

## AO-91 likely to be a great "Easy Sat"

By [RICH GILLIN](#)

[AO-91](#) is an FM repeater [1] satellite with a strong 2 meter downlink (receivable with a rubber duck) and an incredibly sensitive receive system on the 70 cm uplink. There are reports of people getting into the bird using a handheld inside a house. That is incredible. If there are no issues, this will likely become another "Easy Sat" like AO-51 was. It's currently being tested by [AMSAT-NA](#) but it will be open for general use very soon.



For years, the only FM bird was SO-50. It has a great receiver but the downlink is not strong (only 250 mW), so it isn't easy for beginners to use. AO-85 is another FM satellite that was launched a couple years ago. It has a powerful transmitter, but due to an [antenna system issue](#), it doesn't receive well. Getting into it with a handheld at only 5 watts can be difficult for beginners and experienced ops alike. Many people use 50 watt mobile FM rigs to compensate for this issue. Its transmit audio can also be low and/or "muffled," making it hard to complete contacts with some low audio portable stations (on sats it's better to talk close to the microphone and loud than far away and low).

AO-91 is of the [same design](#) as AO-85 but the AMSAT engineers seem to have addressed the issues AO-85 had. It has a great receive system and great transmit audio. Compared to SO-50, the things that may be difficult for beginners to deal with are tuning the uplink to compensate for the doppler effect, and to a lesser degree, dealing with signal fades.

SO-50 is 2 meters up and 70 cms down. The doppler effect is more pronounced the higher in frequency you go. On 2 meters with FM, you don't need to compensate much, if at all. On SO-50 you never have to tune the 2 meter uplink. You do tune the downlink, which is easy to do because while other people are talking on it, you can hear when it's off frequency, and can easily adjust until it's right.

AO-91 is the opposite. It's 70 cms up and 2 meters down. If you are off frequency on the uplink you may not be able to get in at all. If you don't have full-duplex capability so you can hear the downlink while you transmit (highly recommended), you won't be able to tell. I believe they chose a 70 cm uplink instead of a 2 meter uplink because there is considerable unlicensed 2 meter usage in certain parts of the world that can interfere with the operation of satellites on that band. For example, I have heard reports of hearing cordless phones on sats like AO-51 while it was in range of South America, and taxi cab drivers while it was in range of Mexico.

The other thing beginners may be affected by are signal fades. AO-85 and AO-91 both sometimes seem to have transmit signal fades as they tumble. It probably depends on where you are in relation to the satellite and its antennas, and how it's tumbling, because at least with AO-85, it isn't a persistent issue. But SO-50 doesn't have strong fades at all in my experience.

I personally am very excited about how much excitement and how many new hams AO-91 could bring into the ham radio space communications community. During launch on Saturday the [amsat.org](http://amsat.org) website was hard to reach because there were so many people trying to load the liveblog about the launch. Here's to AMSAT-NA for putting this bird up there and for its good life and long service to the community.

NOTE: Even though you can hear the downlink with a rubber duck and maybe even get into the bird with an HT inside a house, you should ideally use a directional antenna like the [Arrow II](#) or the [WA5VJB cheap LEO yagi](#). Full duplex operation is also highly recommended.

NOTE: Do not try to use the repeater until AMSAT-NA has announced that it is open for general use to the public. Currently it is in beacon mode and occasionally they are turning on the repeater for use by designated AMSAT engineers and support. Check the News and Events section at the bottom of the [AMSAT.org website](http://amsat.org) for updates.

AO-91 frequencies:

Downlink: 145.960 MHz.

Uplink: 435.250 (67.0 Hz tone)

Technically it's a "transponder" not a repeater but to make it easy to understand you can think of it like a standard analog FM land based repeater, except it's cross band.

Via JohnBrier's blog

Ref: <https://www.amsat.org/radfxsat-fox-1b-launched-designated-amsat-oscar-91-ao-91/>

# Alaska QSL Bureau

By Roger Hansen, KL7HFQ

The original Alaska QSL bureau was started by Sandy and Mary Olendorff of Big Lake, Alaska. They operated it until John Bierman, KL7GNP took it over and now Roger Hansen KL7HFQ is the present manager. The following information is sent out by KL7HFQ for new users of the Alaska QSL Bureau:

Possibly you may not know about this bureau or how it operates and therefore I (Roger Hansen) will explain. You do not have to be a member of the American Radio Relay League (ARRL) to use this bureau, just make contacts and when asked how to "QSL" say via the bureau. This bureau is an "incoming bureau" only. We receive cards from bureaus around the world, but we do not forward cards from hams to the various bureaus worldwide. Cards received for this purpose will be returned. Please do not return cards to the bureau that you did not contact.

The ARRL suggests keeping self-addressed stamped envelopes (SASE's) on file with your bureau. However, we have found that this is a waste of money because often there is too much or too little postage on the envelopes or the envelopes are too small. Postal increases also raise havoc with the SASE method too. To avoid this, the "postal fund" method is used by this bureau, which is the prepayment of stamp(s) and envelope(s). This method has proven to be the best from a cost perspective. Up to and including two (2) ounces of cards, legal size envelopes are used, and our cost is \$0.01 each and the cost to the hams is \$0.01 each. For over two (2) ounces, manila envelopes are used, and the cost rate is \$0.03 each. When a mailing is made, the cost of the stamp(s) plus the envelope is deducted from the ham's "postage fund." When the "postage fund" gets low, an informal note will be included with the cards and upon receipt of additional funds, the process continues. The date and amount of received funds are noted in the ham's file. There is no set amount necessary to start one's "postage fund." This is determined by the individual's planned activity.

In all correspondence with this bureau, please give your call letters. The files are set up by call sign first, and then name and address. Should a ham decide not to receive QSL cards, please advise in writing and this will be noted in the ham's file.

Please keep this bureau advised as to any change in address or call letters. Also, any former call letters are greatly appreciated since some cards received go back a few years. Regardless of where you reside, and you are using the Alaska call sign, we will forward cards to you. The ARRL "outgoing QSL bureau" service is by far the best to forward cards worldwide, but one must be a member of the ARRL to use this service.

Keep up the good contacts and see you on the air.

Best Regards,

Roger Hansen, KL7HFQ  
Manager, Alaska QSL Bureau  
Alaska QSL Bureau  
P.O. Box 520343  
Big Lake, Alaska 99652

# Why We Must Fight for the Right to Repair Our Electronics

## Pending U.S. legislation could force manufacturers to make repair parts and information available at fair prices

By KYLE WIENS AND GAY GORDON-BYRNE

The [Consumer Technology Association](#) estimated that residents of the United States bought [183 million smartphones](#) in 2016. There are already [as many TVs](#) in this country as there are people. That's a lot of electronics, and these numbers are just going up.

On balance, all this technology is probably making our lives better. But there's a downside, too: The stuff often malfunctions. Unlike the 30-year-old mixer on your kitchen counter that refuses to die, new technology—especially the smart devices with fancy, embedded electronics—breaks more quickly. That trend, [confirmed by a recent study](#) by the German government, applies not just to delicate products like smartphones and tablets but also to equipment we would expect to last for a long time—like televisions, washing machines, and [even tractors](#).



Manufacturers would prefer to sell you their latest models rather than repair your old electronics, so they work to make fixing their products too expensive or too impractical. It's a global problem because the marketplace for technology is global, and people everywhere are affected. With so many people throwing out so much broken stuff, it should come as no surprise that e-waste is the fastest-growing waste stream, with tens of millions of tons discarded annually around the world.

Tossing things out instead of fixing them has far-reaching consequences—for consumers, for the economy, and for the environment. Indeed, a future in which nothing ever gets repaired isn't bright for anyone except the people trying to sell you new products. And many of us are not prepared to accept that future without a fight.

In 2013, a group of concerned consumers, recyclers, refurbishers, environmentalists, digital-rights advocates, and repair specialists in the United States teamed up to found [Repair.org](#), of which one of us (Gordon-Byrne) is executive director and the other (Wiens) is chairman of the board. We're working to make sure that when something breaks, U.S. consumers can easily find the information and parts they need to repair it, or else have it repaired by whomever they choose.

Over the past few years, this battle has been heating up. In 2017, [twelve states](#) introduced "right to repair" legislation that would make it easier for consumers to fix broken digital equipment. With grassroots support, Repair.org is leading the charge to turn these bills into laws. Not surprisingly, we've encountered significant resistance, not from lawmakers but from lobbyists hired by large tech companies to [kill right-to-repair bills](#) behind closed doors.

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You might think that these legislative battles are inconsequential or don't have too much to do with you personally. But if you believe that when you buy something you actually own it, you should pay attention as we explain why that may not be the case and give the history of how we got to today's very odd situation.

**People have been fixing** electronic devices for as long as they have existed. You know the drill: When something breaks, you troubleshoot the problem, take the thing apart, fix or replace the failed component or subassembly, and turn the machine back on. If it works, great. If not, try again. It's as simple as that.

The trouble with repairing computerized products—a category that just keeps growing and includes pretty much anything you plug into the wall or run off a battery these days—is that the path to repair isn't always so straightforward. Sometimes it's easy to see that a connection has come loose or that a capacitor has gone bad, but for the most part identifying and correcting the underlying problem requires sophisticated diagnostic tools and detailed service documentation. If the manufacturer refuses to provide those things, repair is still possible, but it's *a lot* more difficult. Every repair becomes an R&D project.

In past decades, companies that made electronic equipment typically provided the information needed for repair—and usually free of charge. Computers came with schematic diagrams showing how the various components on the circuit boards were connected. Even Apple, now one of the most repair-unfriendly gadget makers in the business, sent a free, [exhaustive manual](#)—complete with schematics—to owners of [the Apple II](#). It was expected that many owners would repair and maybe even tinker with their equipment.

But as the years went on, this kind of information became scarcer. It's ironic. We live in the age of information. And yet, at the very moment when information about how to repair electronics should be easiest for owners to get their hands on, it has dried up.

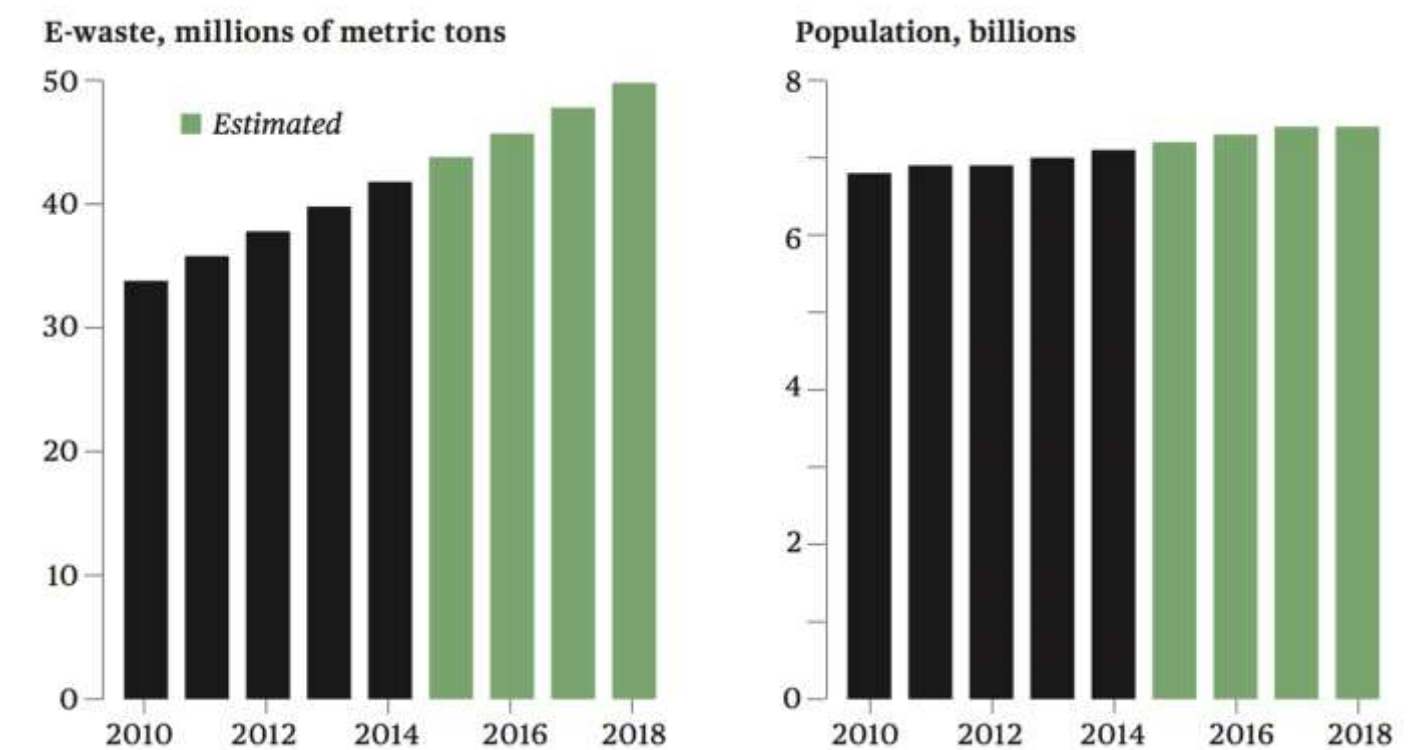
That scarcity is by design. Manufacturers don't want you to fix that broken microwave or air conditioner; they want you to buy a new one. Some even send cease-and-desist letters to people who post repair information online. Back in 2012, Toshiba told laptop repair tech Tim Hicks that he needed to [remove 300 PDFs of Toshiba's official repair manuals](#) from his website, where he was offering the information for free. To avoid being sued, Hicks complied, and now fewer people have the guidance they need to repair Toshiba laptops.



Toshiba isn't the only guilty party. Go to Apple's website and try to find a repair manual for a Mac-Book Pro. It's not there. Go to Samsung's website and look for ways to fix your flat-screen TV. You'll come away empty-handed. Same for your Keurig. Or your Kindle. Or your GoPro. Or your Lexmark printer that's *always* broken. You'll probably find user manuals and perhaps a few other online resources created by people who figured out how to fix the broken product on their own. But manufacturers by and large remain silent on the topic of repair.

Instead, they put official service information and diagnostic tools behind passwords and paywalls, limiting the distribution of repair information to a select few "authorized" providers. Without access to repair instructions, customers are forced to use these authorized service centers, which can charge high prices because there are no alternatives—except perhaps buying a new device.

That's why one of us (Wiens) created [iFixit](#), a company that takes apart popular models of consumer electronics to reverse-engineer repair instructions and then posts the information for free online. The instructions come from iFixit, not the manufacturer, so iFixit can't be sued for disseminating proprietary repair information.



Source: The Global E-Waste Monitor 2014, Institute for the Advanced Study of Sustainability/United Nations University

Even if you happen to find repair instructions on iFixit's website or elsewhere, you still have to locate replacement parts. In some cases, parts are so difficult to get from the manufacturer that people instead extract them from junked equipment, as if they were harvesting organs from the recently deceased. Things are even harder for small repair shops, which struggle to find reliable sources of high-quality replacement parts.

The lack of service parts is an especially big impediment when it comes to repairing smartphones, tablets, and gaming devices. Together, those products number in the billions and yet many models have no independent sources for fragile items like glass. That's crazy because glass, of course, breaks frequently. Fixing it is a big business for phone manufacturers like Apple and Samsung, which are fighting vigorously to protect their monopolies on repair. As of September 2014, gadget insurance company SquareTrade estimated that Americans had spent [\\$10.7 billion on iPhone](#) repairs since the phone's 2007 introduction.

Apple may be the worst offender when it comes to refusing to sell service parts or provide repair information to anyone but its authorized service providers. The company doesn't even provide such information for equipment that Apple won't repair anymore (Apple has a long list of "[vintage and obsolete](#)" devices it no longer supports) or for repairs that its "Geniuses" aren't skilled enough to do, like fixing a computer's motherboard.

In 2015, the company went even further—remotely disabling iPhones whose screens had been repaired outside of Apple's authorized network. One of those dead devices belonged to Antonio Olmos, a photographer for [The Guardian](#). He broke his screen while covering the refugee crisis in the Balkans. There's no Apple store in Macedonia, so Olmos had a local repair shop replace the broken screen with an aftermarket part. It worked great. Months later, though, after a routine software update, Olmos's phone stopped working simply because of that screen.

At first, Apple defended "error 53" (as the problem was identified) as a security measure. The company blamed unauthorized repair shops: "When an iPhone is serviced by an unauthorized repair provider, faulty screens or other invalid components that affect the touch ID sensor could cause the check to fail if the pairing cannot be validated. With a subsequent update or restore, additional security checks result in an 'error 53' being displayed," an Apple spokesperson told *The Guardian*.

But that explanation didn't fly with owners. Independent repair shops didn't break these phones; Apple did. And the aftermarket screens hadn't been faulty; they just hadn't been made by the original equipment manufacturer—because Apple refuses to sell OEM screens to independent repair shops.

Bowing to public pressure, Apple apologized and fixed the broken phones with a new update. But a precedent had been set. Previously, Apple had made it difficult for people to fix its products by restricting access to parts and service information. Now, to those owners who dared to repair their equipment without the company's blessing, Apple could dole out punishment—with software.

**In 2011, the entrepreneur** and venture capitalist Marc Andreessen quipped in an op-ed for *The Wall Street Journal* that "[software is eating the world](#)"—meaning that it's now in pretty much everything: phones, microwave ovens, coffeemakers, sewing machines, even [Barbies](#). And it's threatening to gobble up repair with it.

All computerized equipment comes with embedded software—code that tells the machine what to do and how its components should function together. Without that code, our coffee doesn't brew, our cars don't shift gears, and our sewing machines can't stitch.



When you buy such a machine, the hardware becomes yours. But if you ask manufacturers, they'll say that the software inside still belongs to them. It's copyrighted, and most manufacturers don't want you to touch it, even if the thing is broken. And thanks to a controversial U.S. law called the [Digital Millennium Copyright Act](#) (DMCA) [PDF], manufacturers are allowed to put digital locks on the code to stop people from meddling with (or even looking at) it. The [European Union's Copyright Directive](#) has similar provisions. Originally, these sorts of laws were designed to prevent pirates from copying movies and music. But, increasingly, manufacturers use them to maintain control of the products they sell to you.



[Lexmark](#) famously used the DMCA to [sue Static Control Components](#), which was making chips that allowed other companies to refill Lexmark toner cartridges and sell them again. Recently, [HP](#) went so far as remotely [disabling unlicensed cartridges](#) installed in its printers. Even John Deere [deploys digital locks](#) to make sure that only its own technicians can fix anything software-related on its agricultural machines.



When asked why it was standing in the way of farmers who want to fix their own tractors, the company replied that farmers didn't really own their tractors. [According to John Deere](#) [PDF], farmers have only "an implied license for the life of the vehicle to operate the vehicle," and farmers (or their mechanics) aren't allowed to fiddle with the software to effect a repair.

Naturally, that position upset a lot of farmers, who assumed that when they plopped down \$75,000 or more for a new tractor, they were buying the whole thing. They felt they should be able to fix their tractors on their own terms. And it turns out that the farmers were right.

Authorities in the [U.S. Copyright Office](#)—who presumably have a deeper knowledge of U.S. copyright law than John Deere does—have generally sided with consumers when it comes to repairing. In 2015, copyright officials told John Deere that owners do have the right to [repair their own tractors](#) and other equipment. And, in December 2016, the copyright office concluded [a yearlong study](#) [PDF] on copyright law, repair, and embedded software that solidly confirms that repair is legal under copyright law. The same study argues that federal copyright law can't be used as an excuse to prevent repair.

But that hasn't stopped some manufacturers from continuing to try. For example, as part of John Deere's 2016 End User Licensing Agreement, the buyer agrees to give up all control over the electronics within the machine—including sensors, actuators, and computing units, as well as data, documentation, and diagnostics. What's more, the buyer is assumed to have agreed to the contract simply by [switching on the machine](#) [PDF]. There is no discussion. No negotiation. No signature requirement. Just turn the key and you waive your right to own critical parts of the machine you just bought.

**So how can people** in the United States preserve their right to repair electronics? The answer is now apparent: through right-to-repair legislation enacted at the state level.

Popular support on this issue has been clear since 2012, when 86 percent of the voters in Massachusetts endorsed a ballot initiative that would “[require] motor vehicle manufacturers to allow vehicle owners and independent repair facilities in Massachusetts to have access to the same vehicle diagnostic and repair information made available to the manufacturers’ Massachusetts dealers and authorized repair facilities.”

Carmakers howled in protest, but after the law passed, they decided not to fight independent repair. Indeed, in January 2014 they entered into a national [memorandum of understanding](#) [PDF], voluntarily extending the terms of the Massachusetts law to the entire country. The commercial vehicle industry followed suit in October 2015.

Now we need right-to-repair legislation for other kinds of equipment, too, particularly electronic equipment, which is the focus of “digital right to repair” initiatives in many states.

Similar to the Massachusetts legislation for automobiles, these digital-right-to-repair proposals would require manufacturers to provide access to service documentation, tools, firmware, and diagnostic programs. They also would require manufacturers to sell replacement parts to consumers and independent repair facilities at reasonable prices.

The bills introduced this year in [a dozen states](#) have some variations. The ones in Kansas and Wyoming, for example, are limited to farm equipment. The one most likely to be adopted soon is in Massachusetts, which seeks to outlaw the monopoly on repair parts and information within the state. If it passes, electronics manufacturers will probably change their practices nationwide.

Consumers would then have more choices when something breaks. The next time your smartphone screen cracks, your microwave oven gets busted, or your TV dies, you may be able to get it fixed quickly, affordably, and fairly. And you, not the manufacturer, would decide where your equipment is repaired: at home, with the manufacturer, or at a local repair shop that you trust.

The right to repair electronics isn’t just about repair or even about technology□—it’s about ownership. You bought the thing, and therefore you own it—and not just part of it but all of it. And that means you should be able to fix it or get it fixed by whomever you choose. The terms of ownership shouldn’t change just because the product has a chip in it.

*This article appears in the November 2017 print issue as “The Fight to Fix It.”*

## About the Author

Kyle Wiens is co-founder and CEO of [iFixit](#). Gay Gordon-Byrne is executive director of [Repair.org](#).

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A hearty thank you to Jim Wiley, KL7CC bringing this to the attention of the editor (N9AIG) at KL7AA

# VEC Report

By Kent Petty, KL5T

VEC Session Summary, October 2017										
Location	# Sessions	# Tested	Licensed / Upgraded	New License	Upgraded License	Passed Elem	Failed Elem	Tech	Gen	Extra
Anchorage	1	7	5	3	2	6	7	2	3	0
Fairbanks	1	6	5	3	2	5	3	3	2	0
Seward	1	5	4	4	0	4	1	4	0	0
<b>Totals</b>	<b>3</b>	<b>18</b>	<b>14</b>	<b>10</b>	<b>4</b>	<b>15</b>	<b>11</b>	<b>9</b>	<b>5</b>	<b>0</b>

## News:

Some of you may know that I've been appointed as the new Chairman of the Anchorage ARC VEC by the AARC Board of Directors. Jim has been wanting to "retire" from the position for quite some time, and I've been involved in the background for years with him, so feel somewhat comfortable with taking over the job. This being said, it will be a tall order to step into Jim's shoes .... he wore them for about 25 years and made a lot of innovations happen!

I'm doing my best to get up to speed, and have been working on a few things to get my arms around this monster. A major effort is really administrative, and I'm reviewing and documenting all test sessions for the last 1.5 - 2 years or so. This effort has highlighted to me that there is an opportunity to improve the training we provide you all and to emphasize the importance of making sure we dot I's and cross T's, etc. I continue to work on website changes and hope to publish an updated VE instruction manual in relatively short order.

Welcome to our new Sitka VE team! They've already done a successful testing session (the results will be published next month).

Now for the news I don't like to convey.

The AARC Board of Directors voted this month to start charging for VE test sessions. They have directed me to work with our Finance Committee to establish an appropriate fee (it will probably be \$15) and to work with our IT folks modify our website so that we can accept payments for test sessions online. This is not something we've wanted to do, but our fiscal reality is such that we just don't have an income stream to continue to provide this service for free. All this being said, our plan is to preclude our VEs from having to deal with cash, checks, or other forms of payment at test sessions. In short, we don't want to burden any of our field VE team with handling funds; all payments for testing must be made online. More to follow as we work out those details.

Thanks Jim Wiley, KL7CC for mentoring me through the transition period.

73,

Kent Petty, KL5T  
Chairman, Anchorage ARC VEC

12 Month Summary	
Tot Sessions 12 mths	46
# People Tested	205
# Exams Taken	293
# Exams Passed	191
# Exams Failed	102
# New Hams	117
# Upgrades	53

# Welcome to the new Sitka VE Team!

By [KENT PETTY](#)

The Anchorage ARC VEC welcomes our new Sitka VE team to our program. The team of six VEs will offer monthly testing at the Sitka Fire Department, 209 Lake Street, Sitka, from 1200 – 1400 (except for major holidays). No appointment is necessary to take an exam.

Many thanks to Darryl Ault, AL7BW, for coordinating the effort and to Ben Downing, KL2UF, for being willing to lead the group.

Other members of the Sitka team include:

Todd Dokey, KL4EL  
Michael Sullivan, NL7BY  
Joseph Stalder, KL4EL  
Richard Smith, KK7I

You can learn more about the Sitka testing sessions [here](#). You can also check out the Sitka HAM Amateur Radio Klub (SHARK) on Facebook.

Welcome Sitka VE Team!

73,

Kent, KL5T  
Chairman, Anchorage ARC

# Anchorage ARC VEC Chairman Turns Over Reins

By [KENT PETTY](#)

After 25 years of stellar service as Chairman of the Anchorage ARC VEC, Jim Wiley, KL7CC is turning over the reins to Kent Petty, KL5T.

Jim has been the catalyst for numerous innovations in our local VEC program as well as nationally. He has built permanent teams in multiple Alaskan communities, has certified hundreds of VEs, and the program has processed thousands of applicants and test-takers for new or upgraded licenses. He led the effort for remote testing when it was not possible to place a team of VEs on the ground, and has been a member of the National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC). Jim helped implement the changes to testing protocol as a result of license restructuring (remember those 5 classes of license?), as well as elimination of Morse code testing (Jim built equipment used for Morse code evaluations back in the day). Finally, Jim improved license filing timeliness by allowing our remote test-site leaders to submit test session results directly to the FCC; most times on the same day of testing! All in all, Jim has led the Anchorage ARC VEC through dramatic updates and changes to amateur radio license testing in Alaska for a quarter century.

Kent Petty, KL5T (that's me) has worked with Jim over the years with the program. I've mostly been involved behind the scenes, with focus on our actual interface with the FCC relative to file submission and responses, and have trained most of our remote test site leaders on proper file submission procedures. Thankfully, Jim is not disappearing into the woodwork and has agreed to help me get my feet on the ground to try to keep this program on track.

Thanks Jim for all your efforts. I'm sure that I speak for a broad group of folks in this sentiment.

73,

Kent, KL5T

## *Newsletter Editor Note:*

*The above two articles had logos in the original newsletter and they have been removed. We are not part of the ARRL VEC, we are the Anchorage ARC VEC. The Anchorage ARC VEC was actually the very first VEC. There are now a total of 14 VECs. Reach is separate and independent, but each does have an agreement with the FCC to provide testing services.*

*At the time of publication I didn't know that; I'm sorry if it caused any confusion.*

*Dave, N9AIG*

# Johnny Cash: Morse Code Operator

By Karen Walker

JR Cash enlisted in the United States Air Force on July 7, 1950. When military officials insisted that he have a first name rather than the initials he was born with, he chose John.

Cash was sent to San Antonio, Texas for basic and technical training. On July 18, 1951, he met 17-year-old Vivian Liberto at a roller skating rink in her native San Antonio. The two dated for three weeks, until Cash was deployed to Germany for a three year tour.

Assigned to an Air Force Security Service unit in Landsberg, Germany, he served as a Morse Code Intercept Operator. His duties included operating radio equipment to intercept and transcribe Soviet military transmissions. Cash was the first to pick up the news of Joseph Stalin's death.

During off duty time, Cash traveled throughout Europe and frequently engaged in fishing, one of his lifelong passions. Increasingly serious about music, he bought his first guitar at a German pawn shop for \$5. He began to write and record his own songs using a tape recorder whenever time allowed. Cash became a member of his first band, The Landsberg Barbarians, a group of fellow service-

men. During one recreation night at the base in 1952, he saw the film "Inside the Walls of Folsom Prison" which partially inspired him to write his immortal hit "Folsom Prison Blues."

Another of Cash's favorite activities was to correspond with his sweetheart Vivian back in Texas. The two exchanged hundreds of letters full of expressions of love, longing to be together, gifts and the dream of marriage when he returned to the States.

Cash was honorably discharged as with the rank of Staff Sergeant on July 3, 1954. He returned to Texas and on August 7, one month after his discharge, and married Vivian.

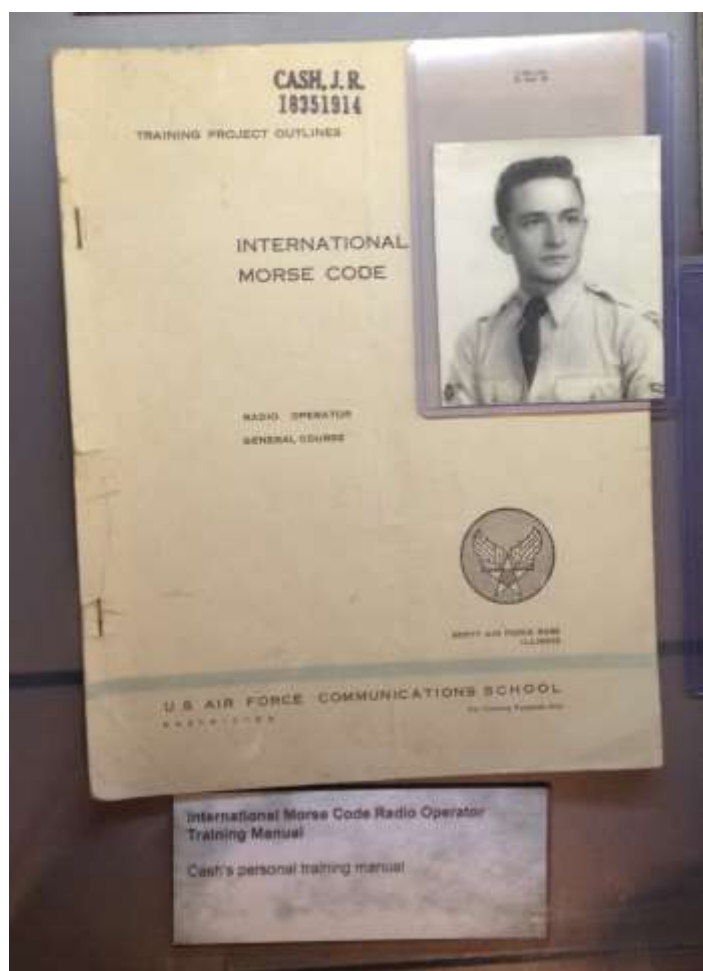


Photo by Karen Walker



JR Cash enlisted in the United States Air Force on July 7, 1950. When military officials insisted that he have a first name rather than the initials he was born with, he chose John.

Cash was sent to San Antonio, Texas for basic and technical training. On July 18, 1951, he met 17-year-old Vivian Liberto at a roller skating rink in her native San Antonio. The two dated for three weeks, until Cash was deployed to Germany for a three-year tour.

Assigned to an Air Force Security Service unit in Landsberg, Germany, he served as a Morse Code Intercept Operator. His duties included operating radio equipment to intercept and transcribe Soviet military transmissions. Cash was the first to pick up the news of Joseph Stalin's death.

During off-duty time, Cash traveled throughout Europe and frequently engaged in fishing, one of his lifelong passions. Increasingly serious about music, he bought his first guitar at a German pawn shop for \$5. He began to write and record his own songs using a tape recorder whenever time allowed. Cash became a member of his first band, The Landsberg Barbarians, a group of fellow servicemen. During one recreation night at the base in 1952, he saw the film "Inside the Walls of Folsom Prison" which partially inspired him to write his immortal hit "Folsom Prison Blues".

Another of Cash's favorite activities was to correspond with his sweetheart Vivian back in Texas. The two exchanged hundreds of letters full of expressions of love, longing to be together, gifts and the dream of marriage when he returned to the States.

Cash was honorably discharged as with the rank of Staff Sergeant on July 3, 1954. He returned to Texas and on August 7, one month after his discharge, and married Vivian.

Photo by Karen Walker



Photo by Karen Walker

# “Giving Tuesday” – AARC Reaching Out

By [KENT PETTY](#)

The AARC is a 501(c)(3) charitable non-profit organization and we would be remiss if we didn't reach out via social media to ask for your support on this “Giving Tuesday”. We are undergoing some drastic changes and cash donations can really help us keep up with ongoing activities and operating equipment and resources such as:

- Our heavy rolling stock (MTV, Pickup, and two power/tower trailers)
- HF, VHF, and UHF stations at the HAM shack
- MESH Networking System
- Voice Repeaters (a total of 6), please a portable repeater
- APRS I-gate / Digipeater
- Hughesnet Internet
- Packet digipeaters
- Telephone and terrestrial internet service
- Insurance



Please help us with maintaining these operations and equipment. All of it helps support our efforts relative to disaster preparedness and is used by a wide range of users for daily activities in our craft.

We know there are many demands on all of us this time of the year, but anything will help stretch our budget to keep us alive and viable.

Please visit our [PayPal donate page](#) where you can donate with PayPal, or with a Debit or Credit Card.

Thanks for your donations.

Regards,

Kent Petty, KL5T  
Vice President

# AARC is Accepting Credit Cards!

AARC can accept your credit card for payment (via Square Reader) of dues and donations. See Kent KL5T at the next club meeting, club working Wednesdays or board meeting. Note that accepting credit card payment via our web-site is still in progress.

Now may be the time to renew your membership; don't forget!



Thanks Kent KL5T, for setting this up

## Donations

The AARC can't operate and maintain the resources we own without adequate funding. Expenses include rent for repeater sites, web and telephone services, club station facility rent, insurance, vehicle and generator fuel, vehicle registration, etc.

We can accept tax-deductible donations as we are a 501(c)(3) charitable organization. We are happy to accept direct donations or contributions but are always exploring other ways to generate the needed income to fund our important activities.

Tax-time is just around the corner; go to the AARC home page and click on "Donations." You can make a tax-deductible donation and help the AARC's budget.

## Have you signed up?

(Fred Meyer can be done via Internet)

Here are two ways you can help fund our Anchorage Amateur Radio Club. Both are really easy on your part. Please consider doing both options:

### **Fred Meyer will give us money!**

All you have to do is shop there and sign up AARC as your non-profit beneficiary. Once you sign up, a portion of every purchase you make is donated to AARC. There is no increase to you for your purchase by declaring AARC as your beneficiary. Currently there are three individuals signed up for this worthy cause. Let's see if we can make it one hundred by the next membership meeting in September!

You still earn your Rewards points, Fuel Points, and Rebates just as you do today.

The AARC's Fred Meyer non-profit number is 94846.

If you don't have a Fred Meyer Reward Card, they are available at their service desk.

Tell your family, friends and neighbors about this opportunity too.



### **Amazon Smile will give us money!**

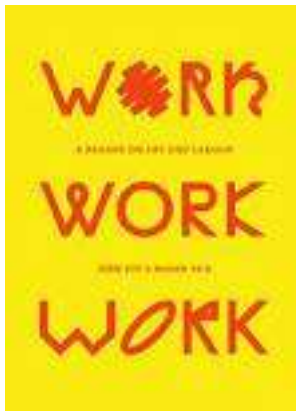
If you do shopping on-line at Amazon, you can designate AARC as your charitable organization. Amazon will donate 0.5% of your purchase to AARC. Log-on to:

<https://smile.amazon.com/ch/23-7225693>

For more information.



# Time to sign-up to help with these projects!



We need everyone's efforts for the following projects that have been identified. Contact the individual indicated to coordinate the work on these projects.

Project or Activity Need	Description	Contact
ARES - Anchorage Department of Corrections Emergency Co-ordinator	We need a lead person to coordinate support for the Anchorage area State of Alaska Department of Corrections emergency communications needs. An MOU is in place. We need a point person. Ready to get involved?	KL5T
ARES - Membership on Critical Resources Teams	Become a member of a team supporting a critical communications resource or served agency. We do need your help.	KL5T
Assist with donated tower take-downs and removals	Are you willing to assist with tower dismantling? We always need help. Are you willing to be a tower or ground crew member?	KL5T
Assist with removal and disposal of "dead lead" (old batteries)	These need to be hauled away periodically. Can you be the dead lead leader?	KL7TS
Build Worktop for Operating Table for MTV	The MTV uses a 2' x 4' portable table as a work top. It would be enlarged somewhat by building a 2' x 6' top that sits securely overtop. Do you have some woodworking skills?	KL7MM or KL5T
Cable Crimp Tool God / Goddess	We have a lot of crimp tools that need to be characterized, instructions provided, and training to be provided on their use. A worthwhile project. Are you up for it?	KL7TS or KL5T
Club Antenna Analysis, Characterization, and Repair	Evaluate antennas on the shelves for resonant frequency(ies), structural integrity, label, and store. Use the club's AIM antenna analyzer to characterize.	KL7TS or KL5T
Club Member Antenna Sweep and Analysis	Visit club member's home stations to sweep antenna systems with club's AIM antenna analyzer. Also check mobile systems.	KL7TS or KL5T
Club Work Shop Organization and Storage	We need to get the work shop area organized so it is more functional and looks like a professional shop. Are you a great organizer?	KL7TS
Document Scanning	Lots of club documents need to be scanned. Any help would be appreciated	AL2R or KL7GD

Continued on the next page

Project or Activity Need	Description	Contact
Equipment Inventory and Management	Assist Vice President with equipment inventory, labeling, and database management.	KL5T
Front Office Organization and Storage	The club's front office needs to be organized. Shouldn't be too difficult a job, just needs to be tackled.	KL7TS
Garage Organization and Storage	Need some real help here. If we can get this space organized it will make a real difference being able to get work done.	KL7TS
Hand and Power Tool Organization	Organize all hand and power tools at the club station. Many tools need to be labeled with ID numbers and added to the inventory.	KL7TS
LCD Monitor Repair	An LCD monitor needs repair. It needs a couple capacitors replaced. An instructional video for the repair is available. This is a good novice project.	KL5T
Manager the Club's Facebook Page	Yep, we are on Social Media and really need someone to manage our Facebook page. Can you help?	AL4S, KL5T, or KL7M M
MESH Network - File Server	Develop a file server for the MESH network using a Raspberry Pi. Systems are in place as examples.	KL5T
MESH Network - PBX	Assist with MESH system Raspberry Pi telephone server (PBX).	KL5T
Mezzanine Organization and Storage	This is our primary long storage area and really needs to be cleaned up. Can you help?	KL7TS or KL5T
MTV Equipment Outfitting	We need to get our MTV Properly outfitted so it can deploy and operate on a moment's notice. Can you work with our Heavy Rolling Stock Manager to assist?	KL7M M or KL5T
Project or Activity Need	Description	Contact
Portable Deployable Kit Manager	We need someone to manager our deployable kits. These include simple portable voice stations, packet stations, crossband repeater units, and MESH units in the future. This is a cool job!	KL5T
Reprogram Portable 440 MHz Portable Repeater Morse IDer	We need to reprogram the Morse IDer in our portable 440 repeater. We've got the keypad to do the job, but need someone to champion the effort.	KL7TS or KL5T
RF Cable Labeling	Characterize and label all active and available antenna feedlines using club's cable labeler.	KL7TS
RFI Team Lead	The club has some excellent RFI detection equipment. We need to get it into service on a regular basis. How would you like to lead the effort to track down the countless sources of harmful interference in Anchorage?!	KL7TS or KL5T
WX3in1 Plus 2.0 APRS Digipeater / I-Gate	Configure hardware, set system parameters, and install the club's WX3in1 Plus APRS unit at AARC hillside site located at KL7QN's residence.	KL5T

An opportunity to have “eye-ball” QSO’s and get a project completed!



ANCHORAGE AMATEUR RADIO CLUB  
BOARD MEETING  
October 17, 2017  
540 WEST INTERNATIONAL ROAD  
Anchorage, AK

**APPROVED**

The meeting was called to order at 7:00 PM by President Lara Baker AL2R

A quorum was established

**BOARD MEMBERS PRESENT:**

Lara Baker AL2R, Jill Heimke WL7BTT, Keith Clark KL7MM, T.J. Sheffield KL7TS, George Wilkinson KL1JJ, Dan Knapp KL4CX, Lil Marvin KL7YF, Richard Tweet KL2AZ

**BOARD MEMBERS PRESENT VIA TELECONFERENCE:**

Jim Wiley KL7CC, Dave Heimke AL7LO, Rich Gillin AL4S, Dave Webb N9AIG

**NON-VOTING MEMBERS/GUESTS PRESENT**

Allen Abbott KB1QCE, Alice Baker KL2GD

**EXCUSED BOARD MEMBERS**

Kent Petty KL5T

**UNEXCUSED BOARD MEMBERS**

None

**REQUEST FOR AGENDA ITEMS**

AARC PayPal, Budget Discussion and Christmas Meeting

**GUESTS**

None

**TIME CRITICAL ITEM(S)**

None

**REPORTS**

**SECRETARY REPORT**

Previous Board meeting minutes for the September 2017 Board Meeting, and October General Membership meeting were presented. Motion made by George Wilkinson KL1JJ, seconded by Keith Clark KL7MM to accept the minutes as presented with minor grammatical corrections. Motion passed with no objection.

**TREASURER'S REPORT**

Alice Baker KL2DG noted that with Jill Heimke WL7BTT assuming the Treasurers duties, related Treasurer items, as well as signature authority, have been turned over to Jill. AARC PayPal account details were discussed. The Post Office key issue is resolved. The 2018 budget was presented comparing the current year to the forecasted year. Motion made by George Wilkinson KL1JJ, Seconded by Lara Baker AL2R to accept the budget as presented. Discussion was held on line items included in the budget. The motion passed unanimously and will be presented to the membership at the November meeting for approval.

## **FINANCE COMMITTEE**

Keith Clark KL7MM reported on the Finance Committee meeting. Jill Heimke WL7BTT is getting up to speed as the new Treasurer. AARC will be moving the bank account to save on service charges. A business upgrade to the AARC PayPal account was tabled to the next Finance meeting. Restitution payments are still \$0 and Keith continues to work the issue. Keith noted the State closed the local restitution office in June and he is working with a remote office now. Keith reported on steps being taken to reduce club expenses.

## **PROJECTS COMMITTEE**

T.J. Sheffield KL7TS reported that the APRS Digipeater 'blue box' installation at KL7QN's location is operational.

## **GRANT COMMITTEE**

Lara Baker AL2R reported that Kent Petty had submitted six \$2500 grant requests to Walmart on behalf of AARC, Grants.com is still being set up, and workgroup/workshops is still being set up.

## **GAMING REPORT**

Lara Baker AL2R reported on the balance due the State of Alaska due to Boniface Bingo's unpaid unemployment insurance tax, which is estimated to be between \$150 and \$200 for the AARC's portion of the unpaid balance. Brief discussion was held on the availability/use of the AARC's gaming permit.

## **BUILDING COMMITTEE**

Dave Heimke AL7LO reported that the lease application to the airport for the FCC building is progressing slow and steady. We are currently waiting for FAA's approval to be followed by a draft lease agreement for approval and a 30 day public comment period. The Municipality of Anchorage parcel ID is being researched for tax implications.

## **EQUIPMENT REPORT**

No report was given as Kent Petty KL5T was not available.

## **VE PROGRAM REPORT**

Jim Wiley KL7CC reported that he would be exiting from the VEC program after 25 years, but would remain available as a consultant and requested the Board's approval. Jim noted that he would remain on the Question Pool Committee. Motion made by Jim Wiley KL7CC, seconded by Lara Baker AL2R that the VEC Program management be transferred from Jim Wiley to Kent Petty KL5T. The motion passed unanimously. A comment was made for the record that the AARC has made substantial contributions to the National VEC program through Jim Wiley and noted remote testing and others contributions particular to Alaska. Jim noted the FCC felony question is now on the licensee application and is presenting a challenge in transferring the data with current software.

## **TRUSTEE REPORT**

Keith Clark KL7MM reported that there haven't been any requests for use of the club call and Working Wednesdays continue. Keith noted that annual repeater coordination, including portable repeaters, is complete for the year.

## **MEMBERSHIP REPORT**

Rich Gillin AL4S reported on activity since the last Board meeting.

## **BY-LAWS**

None

## **ARES**

No report was given as Kent Petty KL5T was not available.

## **OLD BUSINESS**

**December Meeting – Christmas Party** – For the December meeting, Lara Baker continued discussion regarding the December membership meeting. Discussion was held on APU catering costs, finger food options, Chinese auction (gifts \$25 or less), and a contest will be held for the best, crazy, Christmas sweater/sweatshirt.

## **NEW BUSINESS**

Banking requirements include a need for a resolution from the AARC Board to allow the new Treasurer, Jill Heimke WL7BTT, to be a signer on all accounts or forms provided by the bank. Motion made by Keith Clark KL7MM, seconded by Lil Marvin KL7YF on said resolution. The motion passed unanimously.

## **PROGRAM FOR NOVEMBER MEETING**

Lara Baker AL4S noted the ARCC budget would be presented to the membership for approval. Allen Abbott KB1QCE reported that the presentation for the meeting would be on Disaster First Aid.

## **ADJOURNMENT**

The meeting adjourned at 8:22pm.

Respectfully submitted as recorded on 10/17/2017 by  
Richard Tweet KL2AZ, Secretary

ANCHORAGE AMATEUR RADIO CLUB  
MEMBERSHIP MEETING  
November 3, 2017  
Carr Gottstein Building – APU Campus  
Anchorage, AK  
**APPROVED**

**Call to Order**

The meeting was called to order at 7:00 PM by President Lara Baker AL2R. A quorum was established (32 in attendance). Members and guests introduced themselves.

**Announcements**

Lara Baker AL2R noted that Jim Wiley KL7CC would be turning over the VEC Manager position to Kent Petty KL5T. Jim will remain active at the National VEC level. Craig Bledsoe reported on his recent attendance at the AMSAT Symposium.

Other announcements made were that EARS would be holding an Open House on the 3<sup>rd</sup> Saturday and that a Friday evening rag chew was being worked on, and EARS is holding a raffle with the prize being 2 round trip Alaska Railroad tickets to Fairbanks.

**Business**

The 2018 AARC Budget was presented to the members for review and discussion. Motion made by George Wilkinson KL1JJ and seconded by Craig Bledsoe KL4E to accept the budget as presented. The motion passed with no objections.

Lara Baker AL2R briefed the membership on the Boniface Bingo unpaid unemployment taxes for the first quarter of 2017.

A nearly-new high-viz jacket donated to the AARC was auctioned off to the Membership. Congratulations to T.J. Sheffield KL7TS.

**Presentation**

Allen Abbott KB1QCE gave a presentation on Disaster Medical Operations focusing this presentation on the basics of the ABC's. Airway, Breathing and Circulation. This was a very good session with the reminder that, in a disaster, there will be no help coming for a substantial amount of time and your knowledge of disaster medical operations can help your family, friends, neighbors and others in need.

**Door Prizes**

4 door prizes were awarded.

**Other**

Lara Baker AL2R noted the December meeting will include a Chinese Auction (with a \$25 limit on the gift), finger foods, coffee, water, and will include a T-Shirt/Sweatshirt/Hoodie contest for the funniest/ ugliest or best electronic one worn.

The meeting adjourned at 8:31pm

Respectfully submitted as recorded on November 3, 2017 by:

Richard Tweet KL2AZ, Secretary



# Monthly Events



**1st Friday each month: AARC general meeting - 7:00 PM** in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.33+ repeater.

**1st Thursday each month: Moosehorn Amateur Radio Club General meeting - 7:00 PM** Location is at Borough Emergency Response Center on Wilson Way in Soldotna (behind Soldotna FD. Call for directions on 146.88 repeater (no tone). Moosehorn ARC also holds a weekly luncheon every Thursday, locations and times change — contact George Van Lone, KL7AN: [donnav@acsalaska.net](mailto:donnav@acsalaska.net)

**2nd Saturday each month: PARKA (Polar Amateur Radio Klub of Alaska) Meeting at 11:00 AM.** Polar Amateur Radio Klub of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. Some business is discussed. Originally established as an all woman organization, membership now includes spouses or significant others. Talk in on 147.30+.

**2nd Saturday each month (except for holidays): VE License Exams at 2:00 PM.** at Hope Cottage 540 W. International. Be sure to bring photo ID, copy of license (if any) and any certificates of completion. Contact: Jim Wiley, KL7CC 688-0660.

**3rd Tuesday each month: AARC Board Meeting at 7:00 PM at Hope Cottage 540 W. International. All hams are invited and encouraged to attend.**

**2nd Wednesday of each month: EARS general meeting at 6:00 PM.** EARS meetings are held at the EARS shack location. Contact info - Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: [club@KL7air.us](mailto:club@KL7air.us) or [kl7yk@arrl.net](mailto:kl7yk@arrl.net)

**4th Saturday of each month: Valley VE Testing at 7:00 PM.** Sessions will be held at Fire Station 61, at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Contact Ken Slauson, KL7VE, [Ken.Slauson@gmail.com](mailto:Ken.Slauson@gmail.com) or 907-376-8698.

**The last Friday each month: MARA meeting at 7:00 PM, Wasilla Fire Station 61.** Talk-in help for the meeting can be acquired on the 147.33 repeater. Further details can be found by contacting Don Bush, KL7JFT, [dbush@gci.net](mailto:dbush@gci.net).

**Every Monday at 11:00 AM: Meeting of interested Amateur Radio Operators** — and lunch at Denny's on DeBarr — across from Costco. Many code and HF operators attend this function. Come talk radio. For information, contact Kathy O'Keefe, KL7KO, [kokalaska@gmail.com](mailto:kokalaska@gmail.com)

**Every Saturday at 7:00 AM:** Meeting of a group of Amateur Radio Operators at Village Inn on Spenard Road for breakfast. Topics? Radio, photography, and upcoming events For information, contact Kathy O'Keefe, KL7KO, [kokalaska@gmail.com](mailto:kokalaska@gmail.com).

## Active Nets in Alaska

### VHF NETS

The local VHF Nets have a Packet side as well. Look for 2 meter Packet at 145.01 (Eagle) and 147.96 (Valley). The Eagle and Valley nodes provide a talk” or chat function. Also, if you are unable to connect directly to one of the nodes, try digipeating through EARS on either frequency. Do this by typing *c eagle v ears* or *c valley v ears* on the appropriate frequency. Check [www.KL7AIR.us](http://www.KL7AIR.us) for more information on the digipeaters.

**ARES Net:** 147.33 w/ 103.5Hz tone (Backup 147.30 w/ 141.3Hz tone) —Thursdays at 8:00PM

**No Name Net:** 146.43 simplex—Sundays 8:00PM

**South Central Simplex Net:** 146.52 FM, 144.2 USB, 446.0 FM, 432.2 USB, 223.5 FM, 927.5FM, 1294.5 FM, 52.525 FM, 50.125 USB, 29.6 FDM, 28.4 USB, 145.01 Packet (Eagle Node), 147.96 Packet (Valley Node) - Tuesdays 8:00PM

**Alaska VHF Up Net:** 144.200 USB—Saturdays 9:00 AM

**Alaska Morning Net:** The Alaska Morning Net is held Monday through Saturday from 9:00 AM—11:00 AM on the IRLP Reflector 9109. This net can be reached via several hosting nodes in the area. Please visit [www.status.irlp.net/index.php?PSTART=2&mode=3](http://www.status.irlp.net/index.php?PSTART=2&mode=3) to find the closest node. Also the net can be reached via EchoLink on 9191 (WL7LP-R) and Allstar nodes 27133 and 29332. The Alaska Statewide ARES net is held on Thursday evenings at 8:30pm (following the Anchorage ARES net) at the same locations and also the 8:30pm Sunday evening Alaska Statewide Radio Link.

### HF Nets

**Alaska Snipers Net:** 3.920 MHz 6:00pm daily

**Alaska Bush Net:** 7.093 MHz 8:00pm daily

**Alaska Motley Net:** 3.933 MHz 9:00pm daily

**ACWN (Alaska CW Net):** 3540 kHz, 7042 kHz, 14050 kHz Non-directed, CW calling and traffic watch for relaying NTS of other written traffic. AL7N monitors continuously receivers always on WL2K. (RMS connection available— [AL7N@winlink.org](mailto:AL7N@winlink.org))

**Alaska Pacific Net:** 14.292 MHz 8:30am M-F

**ERC HF Net:** 3.880 MHz 8:30pm Sundays





DATA YOU CAN USE				
Frequency	Tone	Callsign	Features	Area
147.18-	88.5	ADES		JBER
146.88-	no tone	AL7LE	Phone patch	Kenai/Soldotna
146.82-	103.5	WL7CWE	IRLP	Anchorage
146.76-	123.0	KL3K	IRLP	Seward
146.94-	103.5	KL7AA	Phone patch	Anchorage to Wasilla
224.94-	no tone	KL7AA		Anchorage
444.70+	103.5	KL7AA	Phone patch	Anchorage
146.67-	103.5	KL7AIR	MARS station	Anchorage & Highway N
147.30+	141.3	KL7ION		Very Wide Area
146.85-	103.5	KL7JFU	Cross Banded to 444.600	Mat Valley
444.6+	103.5	KL7JFU	Cross Banded to 146.85	Mat Valley
146.91-	no tone	KL7JL		Homer
147.15+	107.2	KL5E	Phone patch	Eagle River/Chugiak
147.84-	103.5	WL7CWE		Wasilla repeater
147.33+	103.5	WL7CWF	Cross linked to 443.900	Very Wide Area
443.900+	103.5	WL7CWF	Cross linked to 147.33	Very Wide Area

South Central Area Simplex Frequencies	
146.52	National Calling and Emergency Frequency
147.57	DX Spotting Frequency
146.49	Anchorage Area Simplex Chat
146.43	Mat-Su Valley Simplex Chat
147.42	Kenai Peninsula Simplex Chat

WinLink Information		
144.9	WL7CVG-10	Anchorage Area RMS
145.19	KL7JFT-10	Palmer/Mat-Su RMS
147.96	KL7EDK-10	Fairbanks RMS
144.9	WL7CVG-4	South Central Digipeater
144.98	KL7AA-10	Anchorage AARC RMS



Image by Zazzle

# December 2017

**Sun      Mon      Tue      Wed      Thu      Fri      Sat**

					<b>1</b> AARC Mem- bership Mtg	<b>2</b>
<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b> AARC Working Wednesday at Club Station	<b>7</b> ARES Net	<b>8</b>	<b>9</b>
<b>10</b>	<b>11</b> AARC Finance committee Meeting	<b>12</b>	<b>13</b> AARC Working Wednesday at Club Station	<b>14</b> ARES Net	<b>15</b>	<b>16</b>
<b>17</b>	<b>18</b>	<b>19</b> AARC Board Meeting	<b>20</b> AARC Working Wednesday at Club Station	<b>21</b> ARES Net	<b>22</b>	<b>23</b>
<b>24</b> Christmas Eve	<b>25</b> Christmas Day	<b>26</b>	<b>27</b> AARC Working Wednesday at Club Station	<b>28</b> ARES Net	<b>29</b>	<b>30</b>
<b>31</b> New Years Eve						

## **Swap 'n Shop**

We currently have no listings for the Swap 'n Shop. Please watch the AARC web-site for additional information: <http://kl7aa.net/swap-n-shop>



If you have anything you'd like included in the next newsletter such as items for sale, articles, questions, etc. email *editor(at)kl7aa.net*

## **Your current AARC Board/Officers**

President	Lara Baker AL2R	president(at)kl7aa.net
Vice-President	Kent Petty KL5T	vicepresident(at)kl7aa.net
Treasurer	Jill Heimke WL7BTT	treasurer(at)kl7aa.net
Secretary	Richard Tweet KL2AZ	secretary(at)kl7aa.net
Board 2017	George Wilkinson II KL1JJ	
Board 2019	Dan Knapp KL4CX	
Board 2019	Lillian Marvin KL7YF	
Board 2019	Rich Gillin AL4S	
Board 2018	T.J. Sheffield KL7TS	
Board 2018	Keith Clark KL7MM	
Board 2020	Alice Baker KL2GD	
Board 2020	Jim Wiley KL7CC	
Board 2020	Dave Heimke AL7LO	
APRS	Kevin Opalka	
Activities	Allen Abbott KB1QCE	activities(at)kl7aa.net
Trustee	Keith Clark KL7MM	trustee(at)kl7aa.net
Newsletter Editor	Dave Webb N9AIG	editor(at)kl7aa.net
Membership	Rich Gillin AL4S	membership(at)kl7aa.net
VE Testing	Kent Petty KL5T	ve(at)kl7aa.net
Webmaster	Rich Gillin AL4S	webmaster(at)kl7aa.net
Internet/Network	Rich Gillin AL4S	ip(at)kl7aa.net

# Newsletter Editor Notes

A few parting items in this revised newsletter:

1. Please watch the AARC web-site for changes in our meeting location. It will be changing in the coming months. That change will be indicated in this newsletter too.
2. I always welcome articles that pertain to Amateur radio for publication in the newsletter.
3. Any suggestions for improving the newsletter are also welcome

Thank you

DWW, N9AIG